A CASE OF MALARIA PRESENTING THE SYMPTOMS OF DISSEMINATED SCLEROSIS, WITH NECROPSY.*

By William G. Spiller, M.D.

ABSTRACT.

Dr. Spiller reported a case in which the symptoms were: Marked intention tremor of the left upper limb, marked ataxia of the left lower limb, transitory hemiparesis of one side of the body, and later of the other side; headache, vertigo, drowsiness, diplopia, marked vertical nystagmus, distinctly scanning speech, and exaggerated tendon reflexes on the right side. The man died after an attack of severe diarrhea, probably of malarial nature. In the microscopical examination every capillary of the central nervous system was found plugged with pigmented malarial parasites of the estivo-autumnal form. A slight area of sclerosis was found in the outer part of the middle third of the left crusta, and the right crossed pyramidal tract was slightly but distinctly sclerotic. The most probable cause of this slight sclerosis of only one motor tract was probably small hemorrhages of ancient date. This view was confirmed by the numerous small recent hemorrhages and altered blood pigment found within the central nervous system. The only apparent cause of these hemorrhages was the malarial parasite. No areas of disseminated sclerosis were found. The case shows that the symptoms of disseminated sclerosis occurring from malaria are probably the result of vascular alteration of the nerve centers. This seems to be the only case on record in which the symptoms of disseminated sclerosis occurred in malaria and a microscopical examination of the nervous tissues was made.

DISCUSSION.

Dr. Chas. K. Mills said that Dr. Spiller's paper was a valuable contribution. It is possible that he did not understand fully Dr. Spiller's interpretation of the production of the symptoms, but there was one point which seemed to Dr. Mills to have needed more consideration than was given to it. While this was undoubtedly a malarial case, it was a question whether after all the ataxic symptoms, the unilateral symptoms, which led to the diagnosis, were due to toxemia—were due, in other words, to the unilateral intoxication of the nervous centers. Dr. Spiller himself said that probably both halves of the nervous system were affected, and that the sclerosis of one pyramidal tract accounted for the absence of ataxia on the side of the diseased tract.

---

*Reported at the meeting of the American Neurological Association, May, 1900.

While the malarial organisms were present in great number, there were also present in considerable number, and in various regions, a number of hemorrhagic lesions of smaller or larger size. The symptoms in a case like this should not necessarily be attributed to toxemia, but we should consider the possibility of their being due to the disseminated hemorrhagic foci.

Dr. F. W. Langdon desired to add a report of a patient in his hospital service, who came in a state of profound coma, for which no cause could be found, as there was no evidence of gross lesion or uremia. The patient simply had an elevation of temperature, 103 or 103½, and the interne, as is usual in such cases in his service, made a blood examination and found the plasmodia present. The patient was given a full dose of quinine, hypodermically, and the next day was walking around the ward. He had no more coma. His coma was apparently due to malaria.

Dr. W. G. Spiller said he had not had an opportunity of comparing the findings in his case with those of other cases, because no similar case with necropsy was on record. It was possible that small hemorrhages had aided in causing the symptoms, but whatever lesions were found on the left side of the central nervous system were found on the right, with the exception of the moderate sclerosis of the crossed pyramidal tract on the right side of the cord, and the difference in the symptoms seemed to be most satisfactorily explained by that moderate sclerosis.

---

140 UEBER DAS GEWICHT DES SCHWERSTEN BIS JETZT BESCHRIEBENEN GEHIRNS (The Weight of the Heaviest Brain Yet Described). G. C. van Walsen (Neurologisches Centralblatt, No. 13, 1899, p. 578).

Heretofore, what was considered the heaviest of all brains was that described by Simms of a young idiot, which weighed 2,400 grammes. Van Walsen describes one that came under his notice which weighed in the recent state 2,850 grammes. It had been possessed by an epileptic idiot, whose two brothers were likewise macrocephalic. The patient learned to walk during his fourth year, but had no paralysis whatever. There were slight spasms in the muscles of the legs. The brain was proportionately enlarged in all its parts. The convolutions were in no wise exceptional in appearance or in position. Upon microscopic examination it was seen that the ganglion cells were relatively wide apart.

BONAR.